# EDITORIAL ARTICLES.

## RECENT BRITISH CONTRIBUTIONS TO THE SURGERY OF RENAL CALCULI.

The discussion on Renal Surgery at the Leeds meeting of the British Medical Association, in August last, was especially fruitful in bringing out experience in the line of dealing with calculi of the kidney. It is only twenty years since Mr. Thomas Smith read his paper before the Royal Medico-Chirurgical Society of London, in which he proposed, on theoretical grounds, the operation of reaching the kidney from the loin, and incising it for removal of calculi within its cavity. No department of surgical effort illustrates more strikingly the character of the newer surgery of to-day then does this. From the report of the discussion given by the *British Medical Journal*, the following digest is taken:

Mr. Henry Morris, of London, remarked that calculi are imbedded in the kidney in various fashions, and as a consequence, and quite apart from the size of the stones, some are much more difficult to discover than others. In some cases, aspiration or simple incision and drainage are insufficient and nothing less than a digital examination of the interior of the pelvis, of the calyces, and of the commencement of the ureter must be resorted to. A misimpression may be caused during an exploration of the kidney by a deposit of tubercle, or by a small abscess, just beneath the renal surface, which, from its hardness and outline, gives the same tactile sensation as a calculus.

After exposing a kidney of this kind the surface is seen more or less mottled, puckered, and uneven, and, on passing the finger over it, a hard circumscribed spot is felt. On scraping through the kidney this hard spot vanishes as the finger-nail reaches it, and, if the wound at the time is free of blood, a little cheesy matter or a drop or two of pus is seen escaping from it. Or what may happen is this: the hard spot, after being felt and pressed upon two or three times, softens, and then becomes flaccid, and on puncturing it a little pus or cheesy matter escapes. When only one such spot of the size of a pea or horsebean is felt, the sensation strongly suggests a calculus; but when the deposits are multiple mistakes are not so likely to arise, though groups of tubercles of miliary size give the sensation of particles of sand adherent to the capsule.

Clinically, one of the most important signs of calculus, as distinct from the early stages of tubercular disease, is the tenderness on pressure over the kidneys so frequently felt in calculous disease.

Various diseases of the prostate—tubercle, abscess, and stone, certainly—may give rise to symptoms which simulate renal calculus.

Considering the nervous associations between the several parts of the genito-urinary system; and remembering how frequent and painful micturition sometimes is in renal affections, and in what various and distant parts the pain of renal calculus is sometimes felt, there is nothing surprising in the converse condition—namely, pain transferred to the renal region from disease in the lower urinary tract. If, in addition to this pain, there is a small amount of pus or pus and blood in the urine without the symptoms of cystitis, it is easy to understand how doctor as well as patient may associate the seat of the pain with the other symptom. In some cases, it is probable tubercular disease begins simultaneously in the kidney and prostate.

MR. BENNETT MAY, of Birmingham, from an experience of 15 cases in which he had operated for stone in the kidney, emphasized the difficulties sometimes experienced in detecting the stone after the kidney was exposed. In fully half of his cases the stone was fixed in the parenchyma of the kidney. These stones are mostly of slow growth, of oxalate of lime, circular or pyramidal in shape, not branched, and occur in young males. The kidney itself remains apparently healthy, even in a late stage of the disease. The prominent symptom in these cases is the pain; the main diagnostic test is pain on deep local pressure over a small area below the last rib. There may be small microscopic traces of blood or blood in considerable amount after exercise;

but pus is commonly absent or present only in small amount.

These stones are difficult to find, but give the most perfect results if removed. Several of these patients had a narrow escape of leaving the table with their stones undiscovered. In exploring the kidney he prefers to enter the needle and the knife at the outer border, and carry it inward, radiating to the hilus, as it much more thoroughly sweeps the tissue in this way than if entered from behind, and there is less chance of wounding the large vessels. He always cuts into the kidney and explores it with finger and sound, if acupuncture fails.

Stones in the pelvis of the kidney commonly grow much more quickly and to a larger size. Pus appears early and is a prominent feature, and the kidney soon undergoes structural changes, ending in pyonephrosis. These stones are usually easy to find, but recovery is apt to be imperfect.

DR. DAVID NEWMAN, of Glasgow, contrasted the results of nephrolithotomies with and without suppuration of the kidney. In the former, of 60 cases, 34 recovered and 26 died, giving a mortality of 43.3 per cent; whereas, in 42 cases without suppuration of the kidney there was not a single death. This indicates very clearly the importance of making an early diagnosis; and any information which we can collect to aid us in detecting renal disease in its early stages must necessarily improve our statistics. Catheterization of the ureters, and the estimation of the quantity of albumen and the amount of hæmoglobin in the urine may aid one in determining the seat of the hæmorrhage, and in ascertaining whether or not the disease is limited to one kidney. Urine containing blood is always albuminous, but the relative proportion existing between the red corpuscles and the serum depends whether or not the hæmorrhage is associated with inflammation. If the ratio of albumen to hæmoglobin is as 1 to 1.6, then it may be concluded that the appearance of albumen is entirely due to the pressence of blood; but if the quantity of albumen is much increased beyond the proportion just mentioned, the indication is in favor not only of an independent albuminuria, but also points to a renal affection as the cause of the hæmaturia.

MR. LAWSON TAIT, of Birmingham, reported fourteen operations for kidney calculus, all of which were completely and permanently cured. From his experience in these cases, together with many other cases in which he had operated upon kidneys, he advised that all tumors of the kidney, all suppurating kidneys, and all kidneys with persistent, incurable and unbearable pain in them should be exposed by incision, laid open, and thoroughly explored by the finger tip. Stones may then be removed, abscesses drained, and hydatid or cystic growths removed with trifling risk. Removal of the organ will rarely be required save in the case of sarcomatous growths.

Mr. Kendal Franks, of Dublin, called attention to a class of cases which were not uncommon, namely, those in which the diagnosis of renal calculus was almost certain, and in which the symptoms clearly indicated the affected side, and yet in which, when the kidney was exposed, the most careful digital manipulation and the most systematic exploration with a long needle failed to detect the presence of a stone. Now, in such cases the practice had most frequently been to take one of two courses. The first course—and perhaps that most usually adopted—was to close up the wound and to trust to relief being afforded by the division of the nerves which necessarily resulted from exploratory incision. Such temporary relief often followed, but it was very rare to find it lasting, and he ventured to look upon such a proceeding as surgically unsound. The second course which had been adopted was to excise the offending organ, as had been done by Mr. Henry Morris. But this was too severe a remedy, and one which Mr. Morris himself condemned, suggesting that it might be wiser to incise the kidney *in situ* and to search for the stone systematically. This was a proceeding Mr. Franks had himself adopted with marked success. He did not consider that incision into the kidney substance was a formidable proceeding, and as an exploratory measure was much to be preferred to excision. Should the stone be found, it was better to find it in a kidney which, otherwise healthy, still formed part of the patient's body, than in a kidney on the dissecting table. In the case he alluded to the symptoms of the stone were tenderness on pressure over the right kidney, with intense paroxysmal pain, beginning in the right renal region and shooting down the right side into the hip and groin. There was a well-marked deposit of oxalates in the urine but no blood or pus. When the kidney was exposed, no stone could be felt anywhere, and a needle passed systematically through the renal substance failed to detect it. Mr. Franks then incised the kidney for a length of about two inches from the convex border right through the pelvis, and, after some careful search, reached a small abscess cavity containing a small stone and some crystalline particles. The incision in the kidney had to be enlarged to the extent of three inches in order to clear out the cavity thoroughly. The patient made a complete recovery, and had not since been troubled with any of her former symptoms.

Mr. Franks also laid stress upon the importance of leaving the wound in the kidney to granulate without using any means to close it. A case he mentioned showed the aggravated symptoms of renal colic which might be caused by a foreign body, such as a gauze plug inserted into the renal wound. He also thought that by leaving it gaping all blood-clots and *debris* would be gradually washed out, and thus the danger of their forming later the nuclei of stones would be avoided.

## CZERNY'S EXPERIENCE WITH RESECTION OF THE STOMACH AND INTESTINES.

In a paper[1] read before the surgical section of the Society of German Scientists and Physicians, Prof. Czerny gave the results of resections of the stomach and intestines and of the gastro enterostomies performed at his clinic. These results did not include the operations performed for gangrene or acute perforation of the gut. He performed eight pylorectomies for cancer in seven persons, one patient being operated on a second time for a recurrence 11 months after the first operation; this patient died of gangrene of the colon, as did two of his other cases. Two elliptical excisions, one for stenosis of pylorus following ulcer, the other for sarcoma resulted successfully.

Of 3 pylorectomies for non-malignant stenosis 1 terminated fatally owing to separation of the sutures, the other 2 recovered.

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[1] Deutsche Med. Wochenschrift, 1889, No. 45.